

## IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method, comprising:

performing a topology discovery of properties of fundamental path elements of a cluster, including path links, the topological discovery being performed without modification of the path elements;

receiving a request from a client for information on the properties of the fundamental path elements of a path, the request identifying at least a source and a destination of the path;

identifying links and switches traversed in the path to identify all fundamental path elements of the path;

obtaining respective detailed information on properties of each of the fundamental path elements; and

sending a response to the client based on the request, the response providing the information on the properties for the fundamental path elements of the path, including one or more links between the source and the destination.

2. (Original) The method of claim 1, further comprising:

determining whether the request ought to be redirected.

3. (Original) The method of claim 2, further comprising:

sending a redirection address to the client if the request ought to be redirected.

4. (Original) The method of claim 3, further comprising:

submitting the request to the redirection address.

5. (Previously Presented) The method of claim 1, wherein the properties of fundamental path elements include at least one of: link speed, service levels supported, path latency, hop count, maximum transfer unit (MTU), and latency cost.

6. (Previously Presented) The method of claim 1 wherein identification of fundamental path elements is performed using at least one of the following:

the source and the destination are each identified by a respective local identification value (LID), each switch is identified by a respective globally unique identifier (GUID), and each link is identified by at least the port GUIDs of ports connected to both ends of the link.

7. (Previously Presented) The method of claim 1, wherein:

the response identifies an order in which the one or more links are traversed from the source to the destination.

8. (Currently Amended) A cluster, comprising:

a fabric of switches and path links;

a topographical discovery service coupled to the fabric, the service operative to discover properties of fundamental path elements of the fabric without modification of the path elements, including the path links, including identification of links and switches traversed in the path to identify all fundamental path elements of the path, and including respective detailed information on properties of each of the fundamental path elements; and

wherein the service is operative to send a response based on a request from a client for information on the properties of the fundamental path elements of a path;

wherein the request identifies at least a source and a destination of a path; and

wherein the response providing the information on the properties for the fundamental path elements of the path, including one or more links between the source and the destination.

9. (Previously Presented) The cluster of claim 8, wherein:

the client is one of a host and an I/O enclosure.

10. (Previously Presented) The cluster of claim 8, wherein the properties of fundamental path elements include at least one of: link speed, service levels supported, path latency, hop count, maximum transfer unit (MTU), and latency cost.

11. (Original) The cluster of claim 8, wherein:  
the service is operative to determine whether the request ought to be redirected.

12. (Previously Presented) The cluster of claim 11, wherein:  
if the request ought to be redirected, the service is operative to send a redirection address to the client, and the request is submitted to the redirection address.

13. (Previously Presented) The cluster of claim 8, wherein identification of fundamental path elements is performed using at least one of the following:

the source and the destination are each identified by a respective local identification value (LID), each switch is identified by a respective globally unique identifier (GUID), and each link is identified by at least the port GUIDs of ports connected to both ends of the link.

14. (Previously Presented) The cluster of claim 8, wherein:  
the response identifies an order in which one or more links are traversed from the source to the destination.

15. (Previously Presented) The cluster of claim 8, wherein:  
the topographical discovery service is operative to discover properties of all fundamental path elements of the fabric.

16. (Currently Amended) A computer readable medium having stored thereon instructions which, when executed, enables a system to perform a method, said method comprising:

performing a topology discovery of properties of fundamental path elements of a cluster, including path links, the topological discovery being performed without modification of the path elements;

receiving a request from a client for information on the properties of the fundamental path elements of a path, the request identifying at least a source and a destination of the path;

identifying links and switches traversed in the path to identify all fundamental path elements of the path;

obtaining respective detailed information on properties of each of the fundamental path elements; and

sending a response to the client based on the request, the response providing the information on the properties for the fundamental path elements of the path, including one or more links between the source and the destination.

17. (Original) The computer readable medium of claim 16, said method further comprising:

determining whether the request ought to be redirected.

18. (Original) The computer readable medium of claim 17, said method further comprising:

sending a redirection address to the client if the request ought to be redirected.

19. (Original) The computer readable medium of claim 18, said method further comprising:

submitting the request to the redirection address.

20. (Previously Presented) The computer readable medium of claim 16, wherein wherein the properties of fundamental path elements include at least one of: link speed, service levels supported, path latency, hop count, maximum transfer unit (MTU), and latency cost.

21. (Previously Presented) The computer readable medium of claim 16, wherein identification of fundamental path elements is performed using at least one of the following:
  - the source and the destination are each identified by a respective local identification value (LID), each switch is identified by a respective globally unique identifier (GUID), and each link is identified by at least the port GUIDs of ports connected to both ends of the link.
  
22. (Previously Presented) The computer readable medium of claim 16, wherein:
  - the response identifies an order in which one or more links are traversed from the source to the destination.